

# Public Workshop on the Emergency Levee Erosion Repair Project

Sacramento, California  
June 22, 2006



# Purpose of the Public Workshop

- Inform local community and general public about the project work
- Answer questions from the public
- Discuss the potential for other levee repairs

# **Notified Stakeholders of Public Meetings**

- **Federal Elected Officials - Senate and House of Representatives;**
- **State Elected Officials - Governor, Senate and Assembly;**
- **County Officials - Board of Supervisors, County Administrators;**
- **City Officials - City Councils, City Managers;**
- **Federal Agencies;**
- **State Agencies;**
- **Water Agencies - Water Districts, Irrigation Districts, Water Companies, etc.**
- **Reclamation Districts**
- **Business Organizations - Chambers of Commerce, BIA, etc.**
- **Community Organizations - Farm Bureaus, RCRC, Port of Sacramento, etc.**
- **Environmental Organizations - Nature Conservancy, Friends of the River, etc.)**
- **General Public – Advertisements in local and regional newspapers.**

# Background



# Central Valley Flood Control System Projects:

- **2.5 million people**
- **2 million acres of cultivated land**
- **200,000 structures with an estimated value of \$57 billion**

# The system is aging and under funded



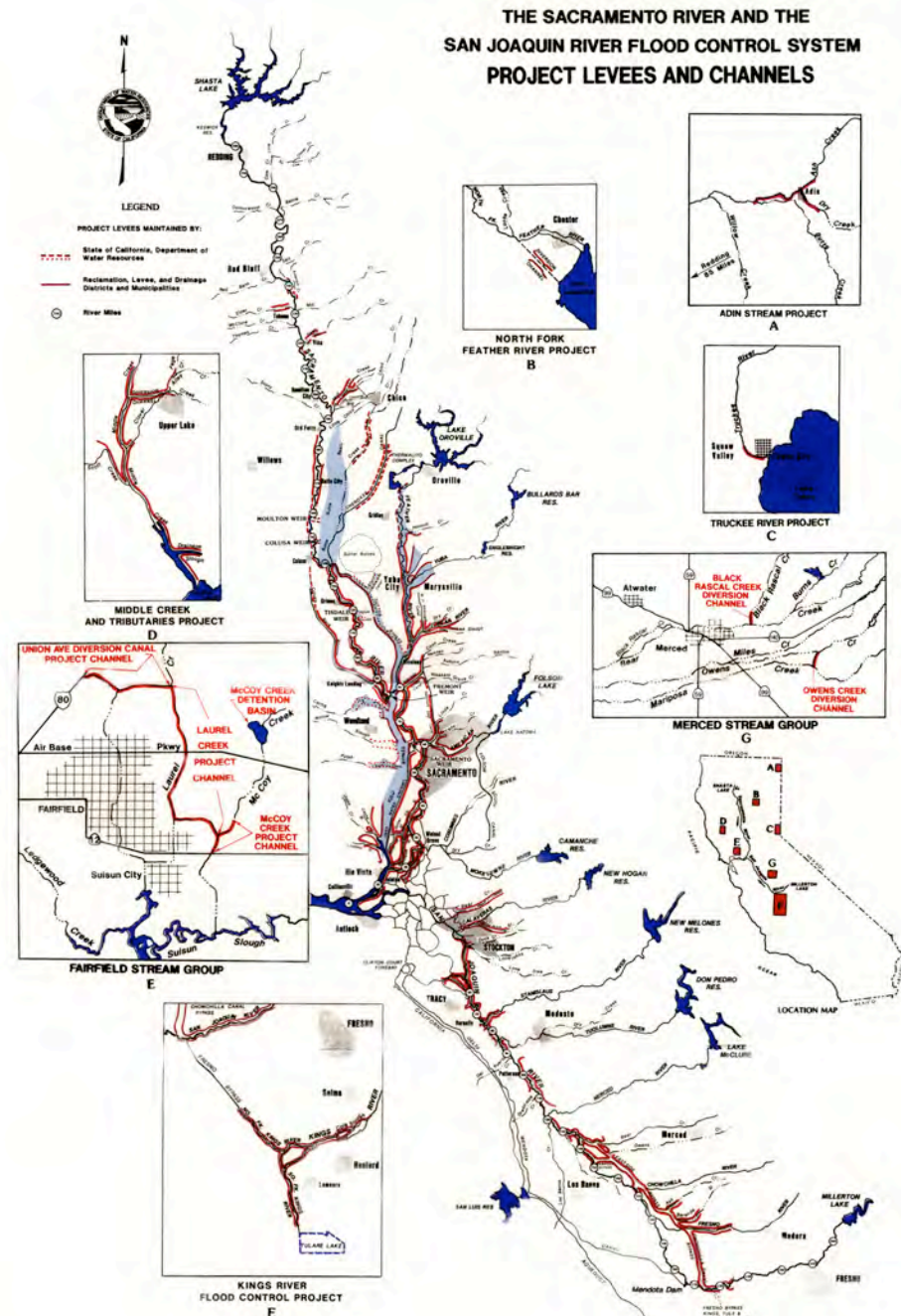
## KEY CHALLENGES IN CENTRAL VALLEY

1600 miles of Federal Project Levees  
 700 miles of local Delta Levees  
 2300 miles of Levees

- Old levees, many originally built by farmers, most without adequate engineering

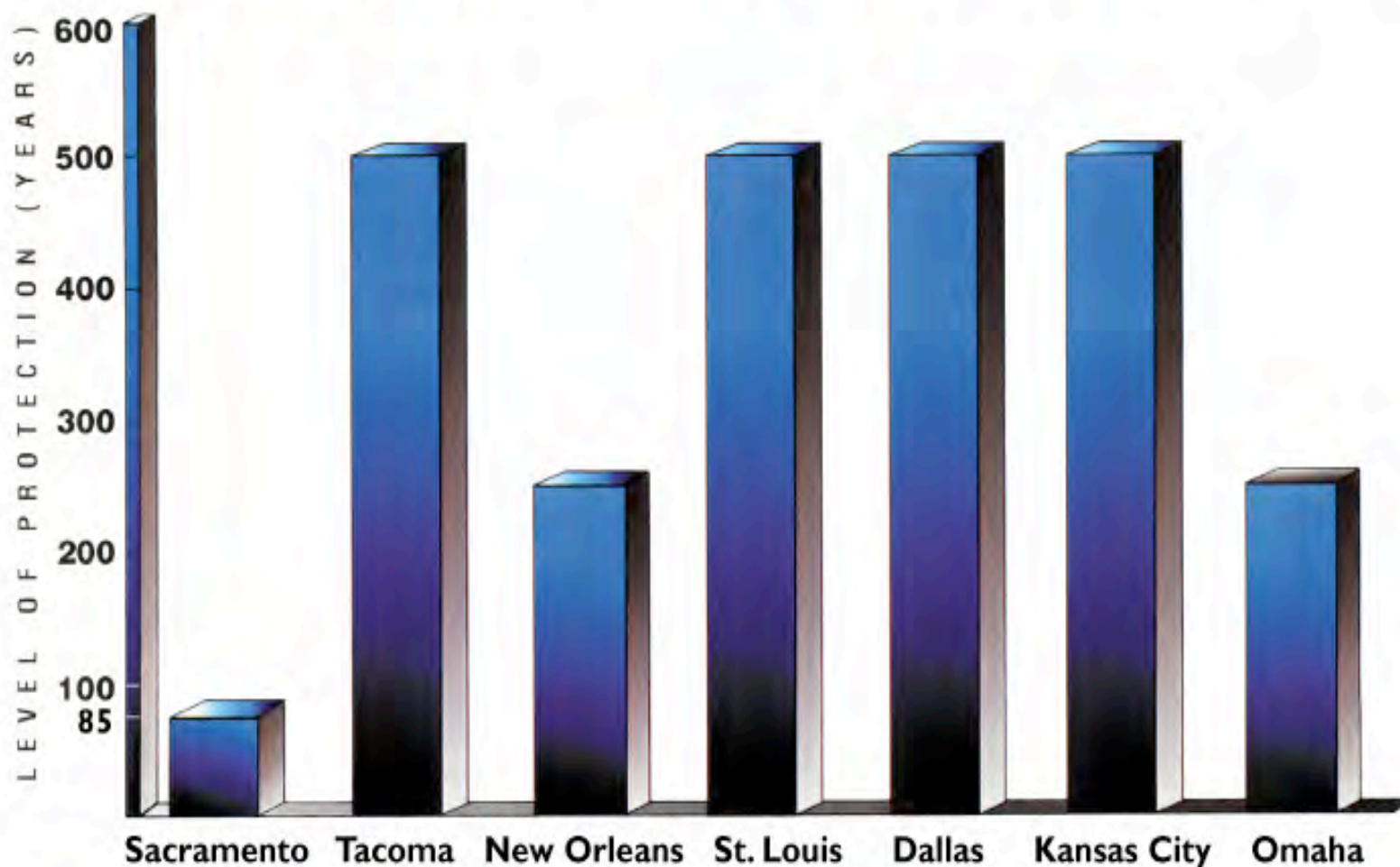


- Aging system, continuing deterioration (e.g. erosion, seepage distress, burrowing rodents)

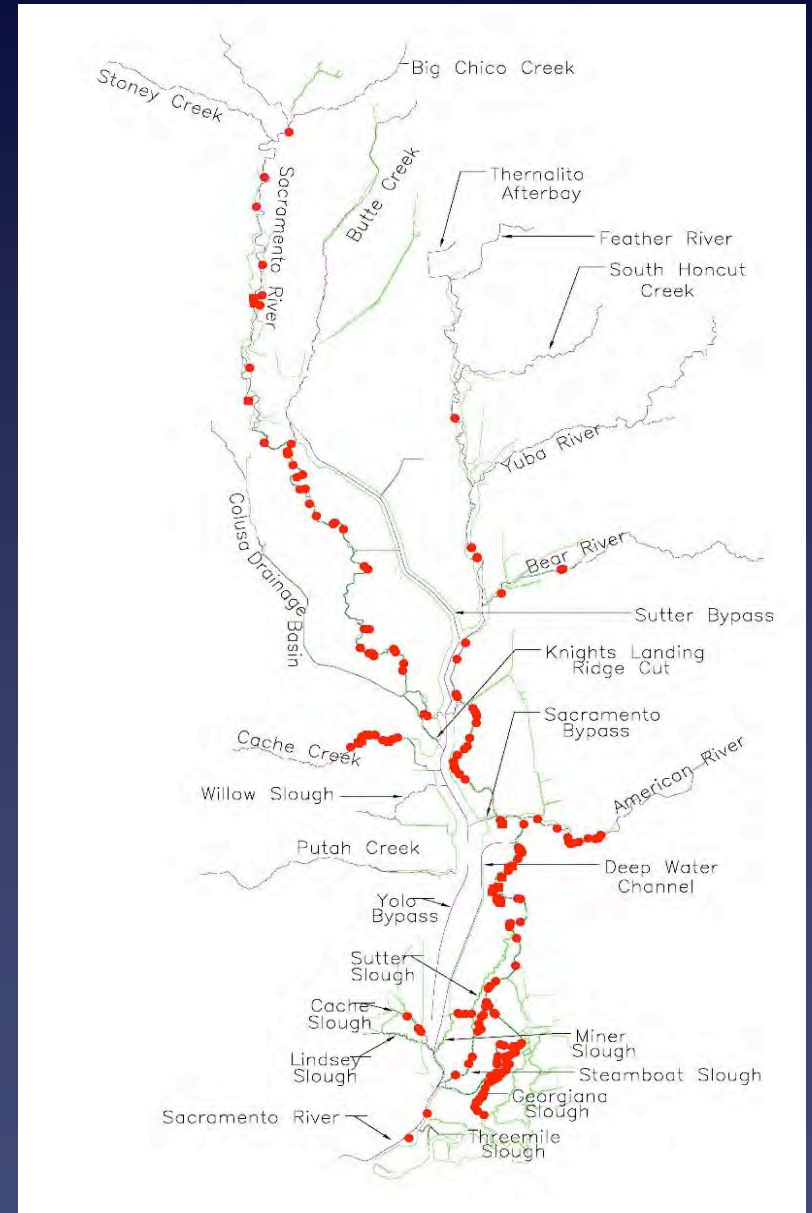




# Sacramento's Level of Flood Protection by Comparison to other River Cities



# Levee and Bank Erosion



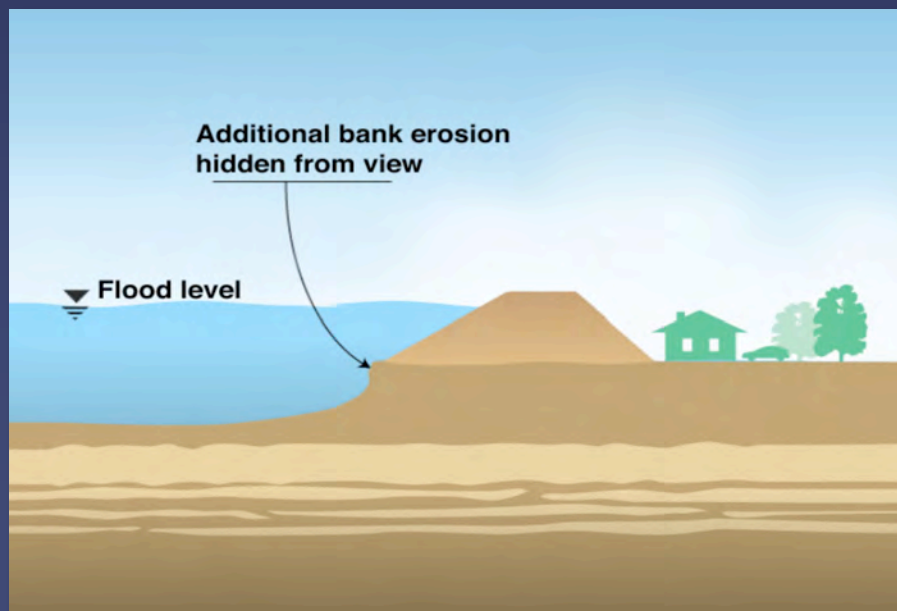
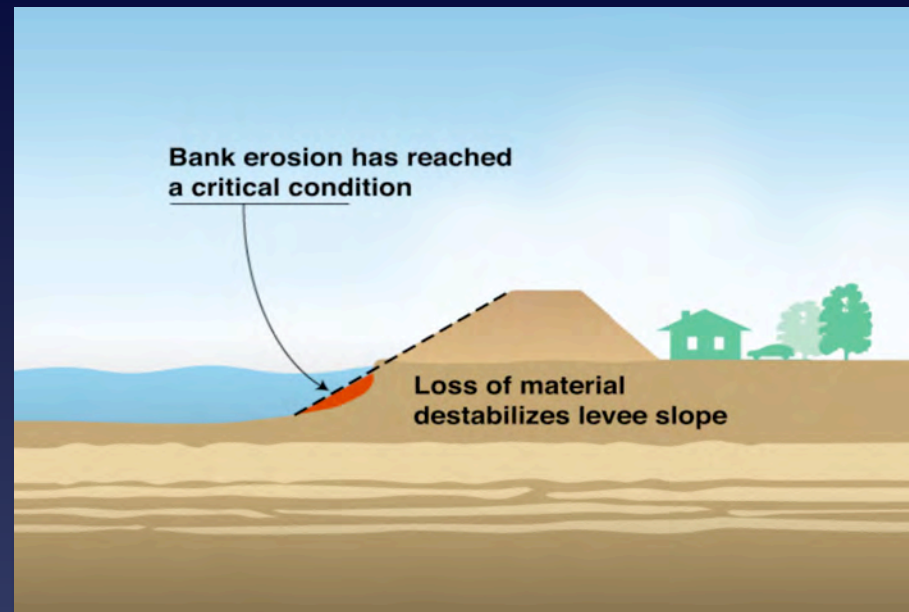


# 2005 US Army Corps of Engineers & State Reclamation Board Field Reconnaissance Study

This December 29, 2005 Study is the basis for 24 sites on the State's levee system being identified as being "critical".

Critical sites are levee locations where the erosion encroaches near or into the levee crown and where further erosion may result in a bank failure. These sites are recommended as the highest priority for repair.

# Levee Erosion



## State Emergency Declaration

- Governor declared State of Emergency for State's levee system (February 24, 2006)
- Provides additional resources to fast-track the repair of critical erosion sites before the next flood season
- Streamlines California Permitting Processes





Critical Site: Sites where further erosion may result in a bank failure, which encroaches near or into the levee crown and is recommended as the highest priority for repair

24 Original Critical Sites

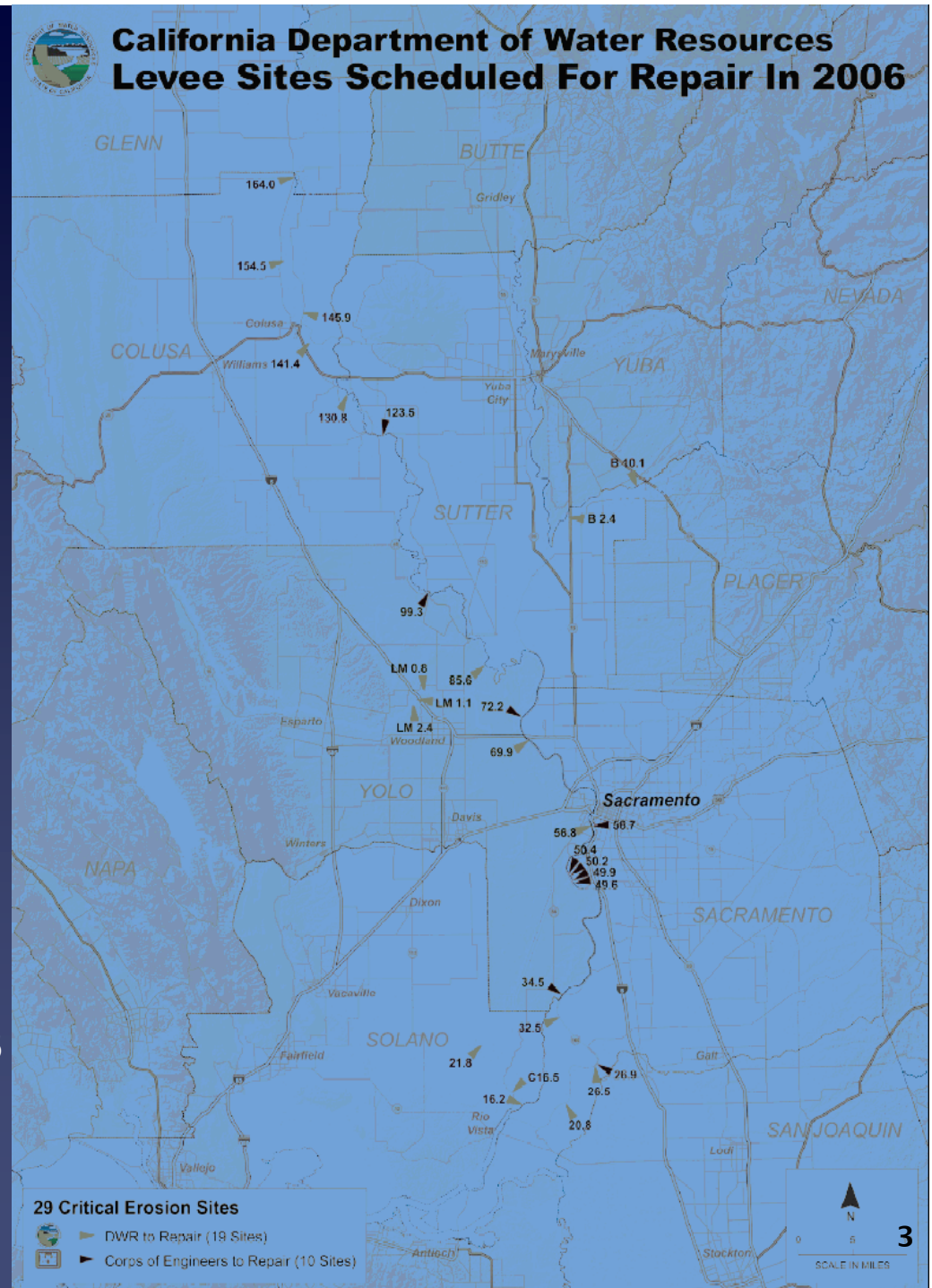
5 Additional Sites Found to be Critical  
(previously potentially critical sites  
that have deteriorated over the last year)

29 Current Critical Sites

10 Critical Sites to be repaired by USACE-RB

19 Critical Sites to be repaired by DWR

29 Current Critical Sites



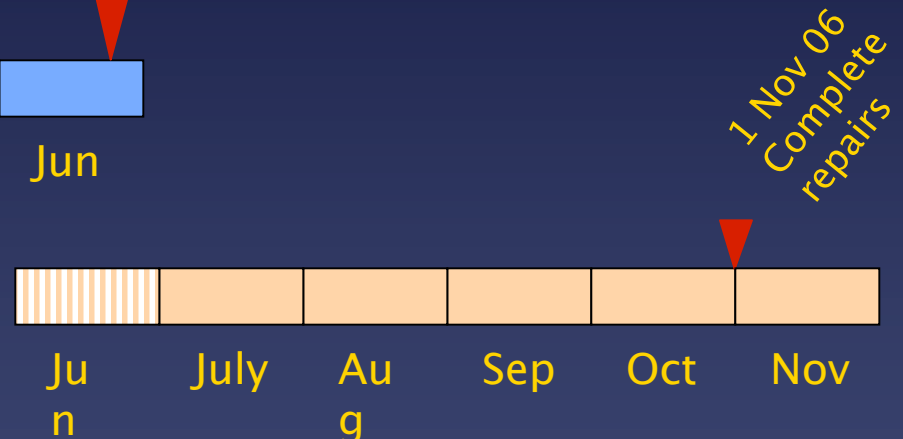


# Emergency Levee Repair Project General Schedule

Design,  
Right of Way,  
Permitting, &  
Bid & Award



Erosion Repair  
Contracts



Vegetation &  
Maintenance Contract



# Environmental Issues and Permits

# Endangered Species – U.S. Fish and Wildlife Service

- **Delta Smelt (and critical habitat)**
- **Valley Elderberry Longhorn Beetle**
- **Giant Garter Snake**

# Endangered Species – National Oceanic & Atmospheric Administration Fisheries Service

- **Winter Run Chinook (and critical habitat)**
- **Spring Run Chinook (and critical habitat)**
- **Steelhead (and critical habitat)**
- **Green Sturgeon (recently listed)**



# Efforts to Protect Environment

The levee repairs will incorporate environmental features to mitigate impacts, including:

- Protect and replant vegetation in water and on benches.
- Include woody material to compensate for fish habitat impacts and reduce erosion.
- Avoid Valley Elderberry Longhorn Beetle habitat.
- Pre-survey for sensitive bird species, such as Bank Swallow, Swainson's Hawk and burrowing owls.

# Mitigation Features

## Goal is Self Mitigation

**Willow  
stalk  
plantings**

**In-stream  
woody  
material**







# Environmental Permitting and Right of Way

All environmental permits and right of way will be secured by DWR and USACOE.



# Right of Way

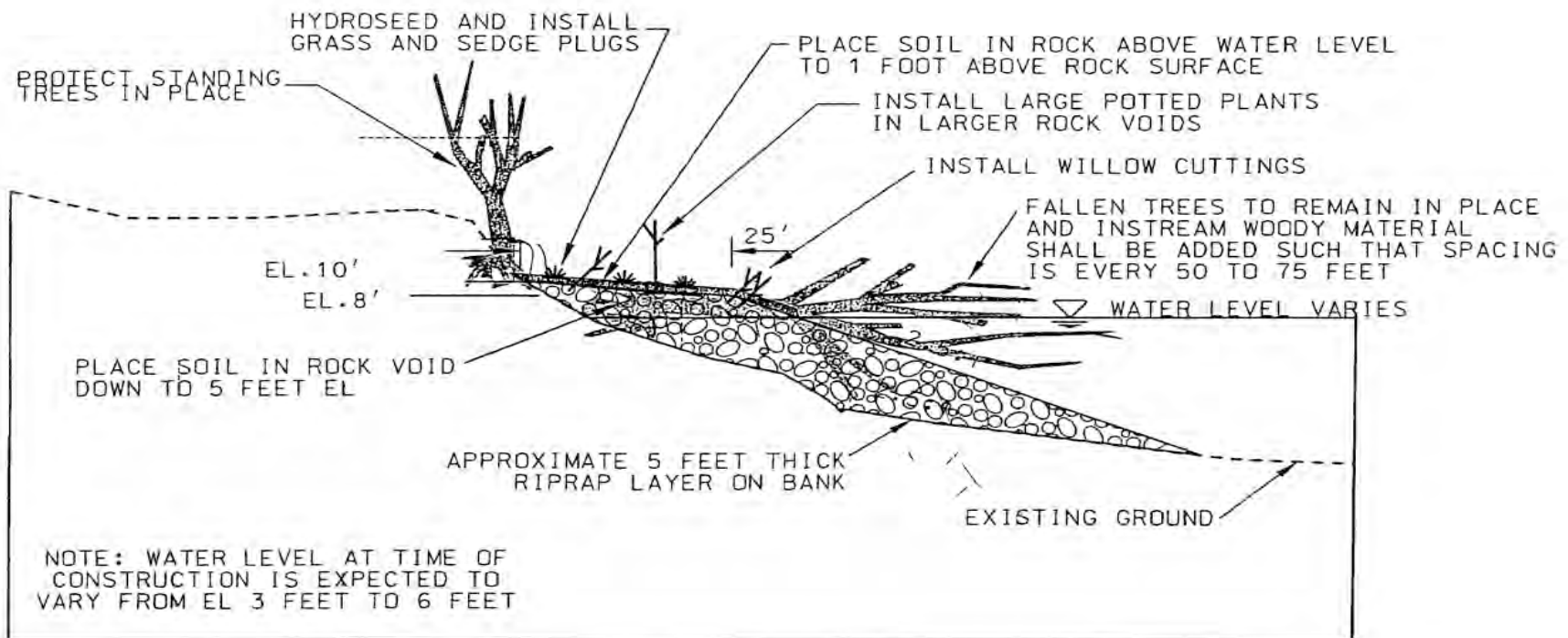
- Goal is to work in partnership with land owners to secure access to levee sites and/or adjacent property.
- Temporary access for construction purposes
- For more information, visit the Property Owners web page at:  
[www.levees.water.ca.gov/owners/](http://www.levees.water.ca.gov/owners/)

City of Sacramento

Critical Erosion Sites Scheduled for  
Emergency Repair

# Typical Levee Repair Cross Section

## U.S. Army Corps of Engineers



# Sacramento River RM 49.6

## Location:

- From Downtown Sacramento, south on Interstate 5 to Pocket Rd/Meadowview Rd Exit; west on Pocket Road to Garcia Bend Park; through park entrance, site on levee road west of park.

## Repair type:

- Rock fill

## Repair Length

- 300 feet (approx.)

## Repair Schedule:

- U.S. Army Corps of Engineers
- Designs – 05/25/06
- Advertised – 06/26/06
- Bid Award – 06/28/06
- Expected completion –





# Sacramento River RM 49.9

## Location:

- From Downtown Sacramento, south on Interstate 5 to Pocket Rd/Meadowview Rd Exit; west on Pocket Road to Garcia Bend Park; through park entrance, site on levee road west of park.

## Repair type:

- Rock fill

## Repair Length

- 300 feet (approx.)

## Repair Schedule:

- U.S. Army Corps of Engineers
- Designs – 05/25/06
- Advertised – 06/26/06
- Bid Award – 06/28/06
- Expected completion –





# Sacramento River RM 50.2

## Location:

- From Downtown Sacramento, south on Interstate 5 to Pocket Rd/Meadowview Rd Exit; west on Pocket Road to Garcia Bend Park; through park entrance, site on levee road west of park.

## Repair type:

- Rock fill

## Repair Length

- 1,500 feet (approx.)

## Repair Schedule:

- U.S. Army Corps of Engineers
- Designs – 05/25/06
- Advertised – 06/26/06
- Bid Award – 06/28/06
- Expected completion – 11 /01/06





# Sacramento River RM 50.4

## Location:

- From Downtown Sacramento, south on Interstate 5 to Pocket Rd/Meadowview Rd Exit; west on Pocket Road to Garcia Bend Park; through park entrance, site on levee road west of park.

## Repair type:

- Rock fill

## Repair Length

- 300 feet (approx.)

## Repair Schedule:

- U.S. Army Corps of Engineers
- Designs – 05/25/06
- Advertised – 06/26/06
- Bid Award – 06/28/06
- Expected completion – 11 /01/06





# Sacramento River

## RM 56.7

### Location:

- West on Broadway; south on Front Street (adjacent to Interstate 5); south on Ramp Way to levee road; site is about ½ mile south of levee access gate.

### Repair type:

- Rock fill

### Repair Length

- 1,500 feet (approx.)

### Repair Schedule:

- U.S. Army Corps of Engineers
- Designs – 05/25/06
- Advertised – 06/26/06
- Bid Award – 06/28/06
- Expected completion – 11 /01/06



# Material Quantities

## City of Sacramento Sites:

- Sacramento River 49.6
  - 12,000 tons rock material (6 barge trips)
- Sacramento River 49.9
  - 12,000 tons of rock material (6 barge trips)
- Sacramento River 50.2
  - 51,000 tons of rock material (26 barge trips)
- Sacramento River 50.4
  - 11,000 tons of rock material (6 barge trips)
- Sacramento River 56.7
  - 18,000 tons rock material (9 barge trips)

Note: Total are estimates of trips based on barge holding 2,000 tons of rock. Additional soil material also will be transported to these sites, slightly increasing the amount of barges













# Typical Hours of Construction

## City of Sacramento Sites

- 6 a.m. to 8 p.m. Daily

Note: Contractors may extend hours and working days for some durations during construction to complete work on time. Times listed may vary.

# Construction Safety Tips

## **Avoid construction sites**

- The general public should avoid repair locations during the construction period.
- The general public will not be allowed on the construction sites during construction period without prior approval.
- Be aware of increased heavy equipment traffic traveling to and from construction sites.

## **Boating safety**

- Boats should stay clear of barge traffic.
- Boats should reduce speeds around barges and/or near repair sites.



# Additional Sites Surveyed by DWR

## Additional Sites – Proposed by local officials as critical

### **Sacramento River RM 43.1 – Yolo County**

- Erosion considered high
- Approximate length is 270 feet
- Temporary repairs had been made but slope is less than 1:1

### **Sacramento River RM 56.1 – Yolo County**

- Erosion considered high
- Approximate length is 500 feet
- No bench visible due to high water conditions

# Project Managers

## U.S. Army Corps of Engineers

- USACOE Project Manager, *Stan Wallin*,  
[Stan.J.Wallin@spk01.usace.army.mil](mailto:Stan.J.Wallin@spk01.usace.army.mil)

## State Board of Reclamation

- Project Manager, *Deborah Condon*  
[dcondon@water.ca.gov](mailto:dcondon@water.ca.gov)

## California Department of Water Resources

- DWR Executive Sponsor, DWR Deputy Director *Les Harder*
- DWR Project Manager, *Don Kurosaka*
- URS Project Manager, *Loren Murray*

**E-Mail:** [leveerepair@water.ca.gov](mailto:leveerepair@water.ca.gov)

For More Information  
visit DWRs Levee Website at:

[www.levees.water.ca.gov/](http://www.levees.water.ca.gov/)

For water conditions, go to:  
[www.water.ca.gov/](http://www.water.ca.gov/)  
then select “Water Conditions”



- [DWR Home](#)
- [Levee Repair Home](#)
- [Critical Erosion Sites](#)
- [Repair Status](#)
- [Construction](#)
- [Environment](#)
- [Property Owners](#)
- [Erosion Report](#)
- [Levee Team](#)
- [History of Levees](#)
- [Links](#)
- [Contact Us](#)

**DWR Levee Repair  
Department of Water  
Resources**

1416 Ninth Street  
Sacramento, CA 95814

Mailing Address:  
P. O. Box 942836  
Sacramento, CA 94236

For public comments or  
questions e-mail:

[leveerepair@water.ca.gov](mailto:leveerepair@water.ca.gov)



**DWR Levee Repair Home - News and Information**

"Increasingly severe weather systems each season have accelerated the deterioration of the state's levee system to the point where they are now in danger of failing during the next major rainfall or earthquake. This worsening situation creates conditions of extreme peril to the public and property protected by the levees, to the environment, and to the very foundation of California's economy."

-- Gov. Arnold Schwarzenegger in a letter to  
President Bush dated February 27, 2006



**Three Public Workshops Next Week**

DWR, with the assistance of the U.S. Army Corps of Engineers, has scheduled three public workshops next week in Yuba, Solano and Sacramento counties to discuss emergency levee erosion repair work on the Sacramento River Flood Control System. (06/16/06)

► [more...](#) ► [Yuba City Presentation](#) (14MB .ppt)



**Public Workshop in Woodland**

DWR will conduct a public workshop on Wednesday evening, June 7 in Woodland, Yolo County, to outline emergency repairs scheduled this summer for levee sites in the region. (06/06/06)

► [more...](#) ► [Presentation](#) (26MB .ppt)



**Workshops Scheduled as Levee Repairs Set to Begin**

DWR has scheduled six public workshops (June 7 through July 6) to discuss emergency levee erosion repair work on the Sacramento River Flood Control System. (05/26/06)

► [more...](#)

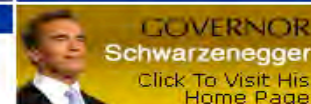


**State-Federal Agreement on Levee Repairs** -- Governor Schwarzenegger and the Bush Administration have finalized an agreement for an expedited permitting process to fix 29 critical levee sites in the Sacramento River basin by November 1, 2006. (05/03/06)

► [Blog Post...](#) ► [Press Release...](#) ► [MOU...](#) (.pdf)

**Five Levee Sites Added to Critical Erosion List**

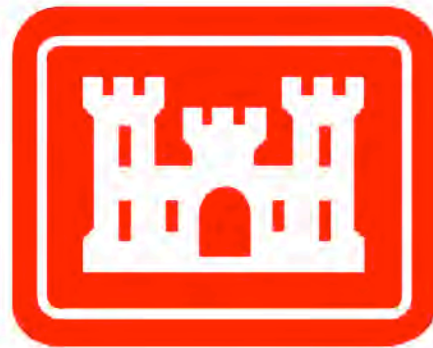
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**Quick Hits**

- [Fact Sheet](#)
- [Public Meeting Schedule](#)
- [Levee News Archive](#)
- [Disaster Preparedness Tips](#)
- [Governor's Emergency Declaration](#)
- [Governor's Executive Order](#)
- [Overview Map](#)
- [Flood Protection Levels](#)





**US Army Corps  
of Engineers®**

# Pocket / South Sac FEMA 100-year Flood Certification



US Army Corps  
of Engineers®



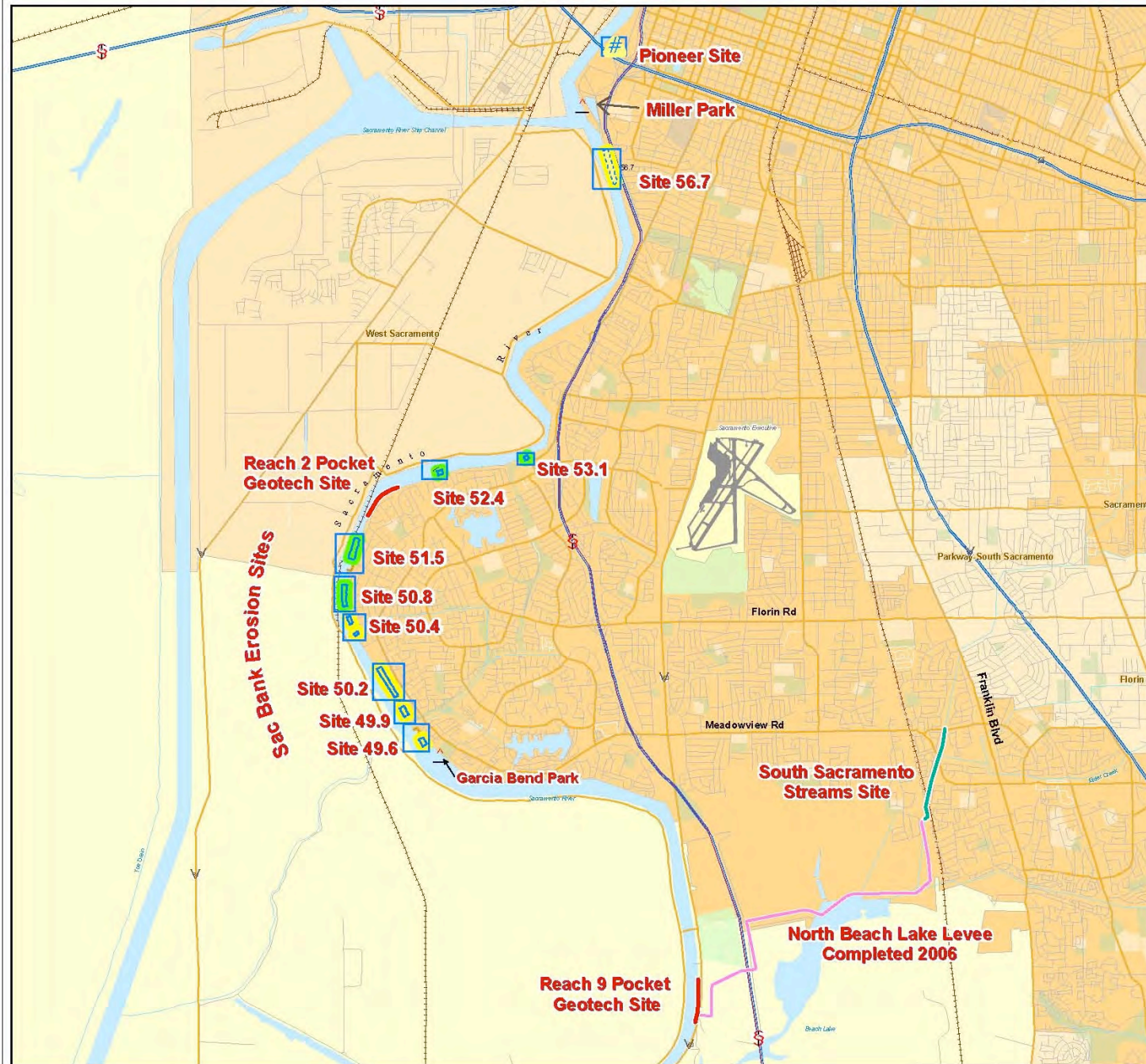
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Control  
Agency



## Legend

- Critical Levee Erosion Repairs Sites
- Levee Erosion Certification Sites
- Geotech Reaches
- Sac Stream Site
- Beach Lake Levee
- Pioneer Site

0 0.25 0.5 1 1.5  
Miles



SAFCA, Inred, 11May06, Inr11\_west.mxd



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Agency**

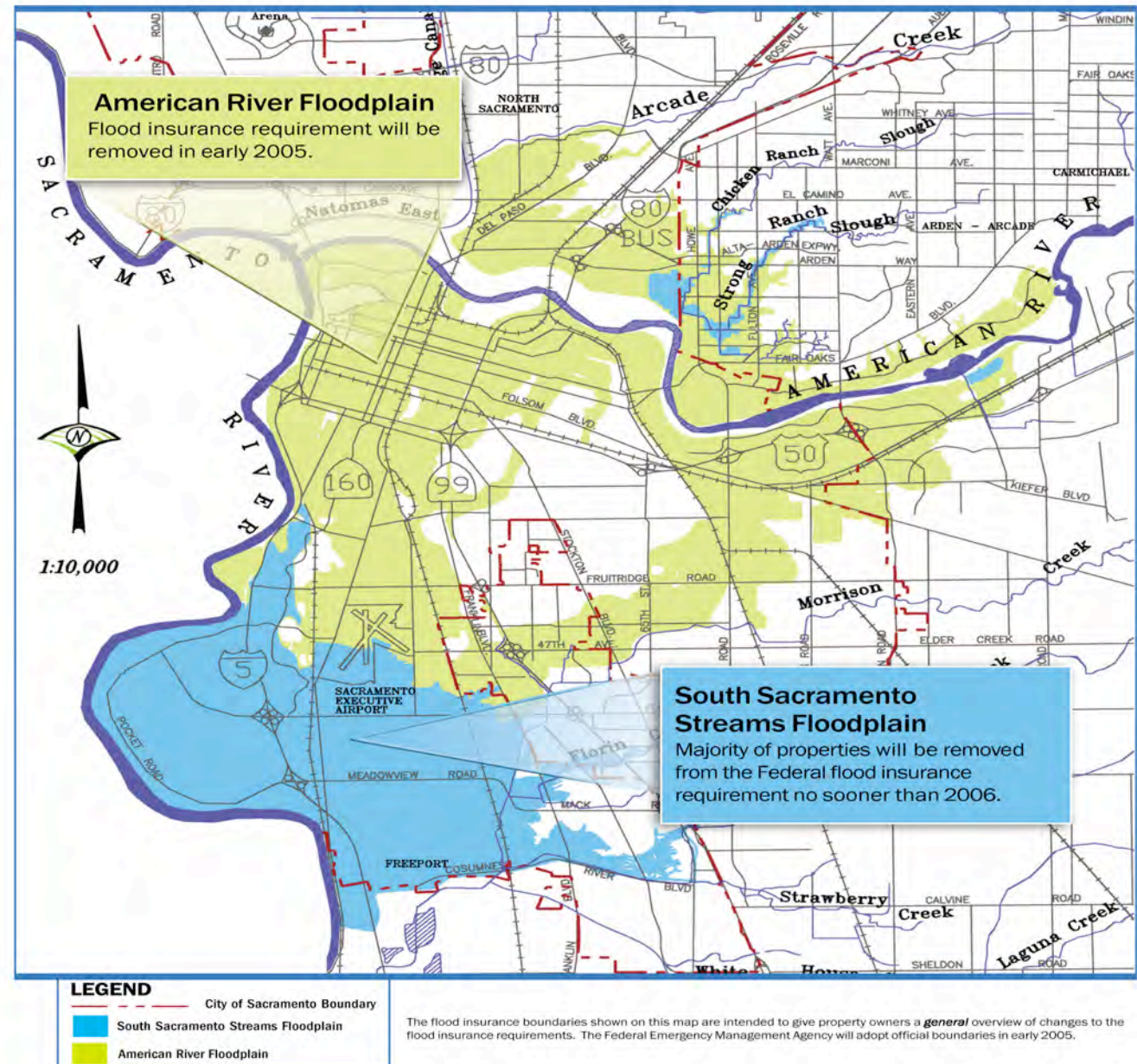




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Control  
Agency

## Revised Flood Insurance Requirement Boundaries for the City and County of Sacramento

(effective early 2005)





# Thank you

